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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,079	03/30/2001	Errol C. Heiman	STL9524	6981

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Kirk Cesari, Seagate Technology LLC
Intellectual Property Department
1280 Disc Drive
Shakopee, MN 55379

EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 11/13/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/823,079

Applicant(s)

HEIMAN ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by USPAT 6,222,172 issued to Fossum et al (hereafter Pat '172). Regarding claim 1, Pat '172 discloses: applying a nominal voltage' to an electronic component [col 3, lines 34-38] introducing a voltage disruption to the nominal voltage [col 3, lines 39-41] repeating the voltage disruption for a specified number of instances [col 3, lines 48-61]

Regarding claims 2 and 9, Pat '172 discloses applying an increase in voltage [col 3, lines 47-50]

Regarding claims 3 and 10, Pat '172 discloses applying a decrease in voltage [col 3, lines 47-50]

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Regarding claim 4, Pat `172 discloses a second voltage is activated a specific amount of time after a first voltage was activated [col 3, lines 50-53]

Regarding claim 5, Pat `172 discloses a second voltage is deactivated a specific amount of time after a first voltage was deactivated [col 3, lines 50-53]

Regarding claim 6, Pat `172 discloses adjusting voltage disruption time duration [col 3, lines 57-61]

Regarding claim 7, Pat `172 discloses computer software controls the adjusting of selected variables [Fig 2, 200]

Regarding claim 8, Pat `172 discloses: a nominal voltage [Fig 1, 134 and col 3, lines 29-31], circuitry coupled to a power source [Fig 1, 134], the circuitry being configured to produce a voltage disturbance [Fig 2, 202, 204, 206, 208, 216] a connector that links the circuitry and the nominal voltage to a device [Figs 1 and 2]

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 6,222,172 issued to Fossum et al (hereafter Pat `172).**

Regarding claim 11, Pat `172 discloses a multiple of voltage magnitudes [col 3, lines 34

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3 6]

Regarding claim 11, Pat `172 discloses the essential elements of the claimed invention except for multiple power sources. It would have been obvious at the time the invention was made to modify Pat `172 to include multiple power sources since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

St Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Regarding claim 12, Pat `172 discloses a decrease and an increase in voltage [col 3, lines 47-50]

5. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPAT 6,222,172 issued to Fossum et al (hereafter Pat `172) as applied to claim 12 above, and further in view of USPAT 5,877,956 issued to Frank et al (hereafter Pat `956).

Regarding claims 13 and 17, Pat `172 discloses the essential elements of the claimed invention except for a connector. Pat `956 discloses a connector [Fig 3, 113]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pat `172 to include a connector as taught by Pat `956 for the purpose of connecting the power cycling circuit to the to the parallel port of the computer [col 6, lines 53-59].

Regarding claim 14, Pat `172 discloses adjusting voltage disruption time duration [col 3, lines 57-61]

Regarding claim 15, Pat `172 discloses a second voltage is activated a specific amount of time after a first voltage was activated [col 3, lines 50-53]

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Regarding claim 16, Pat `172 discloses a second voltage is deactivated a specific amount of time after a first voltage was deactivated [col 3, lines 50-53]

Response to Arguments

Applicant's arguments filed September 25, 2003, have been fully considered but they are not persuasive.

Applicant Argues:

Applicant states on page 5, "Specifically, Fossum does not disclose applying a voltage disruption. It is clear from the description that the elements of Applicant's claim 1 is not expressly or inherently described. And, for at least the reasons described below, a person of ordinary skill in the field of the invention could not interpret the claimed invention to be the same as Fossum. Foremost, Fossum does not disclose "introducing a voltage disruption to the nominal voltage as stated in applicant's claim 1. The plain meaning of the term disrupt is well understood as to interrupt the normal course. Merriam Websters's Collegiate Dictionary."

Examiner Responds:

Examiner is not persuaded. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Therefore, it is Applicant's claims supported by the specification which is being considered for patentability. Recourse for a meaning of a term in the claims should be to applicant's

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specification and not to a dictionary. Applicant states in page 7 of the specification, the following:

With the DUT 105 powered on, the operator of the computer application 102 is able to specify **voltage disruptions or glitches 506-507 to be enabled**. The operator may select whether the **voltage disruptions 506-507** will be enabled for the 5 Volt power 502, the 12 Volt power 503, or both. The operator is able to control the voltage disruption frequency by controlling the interval 508 between disruptions. The operator is also able to control the duration of the **voltage disruption 509** and the amplitude 510. If the operator specifies a peak voltage value for the voltage disruption, then the corresponding low voltage value will be a default, and vice versa. The operator may not set both peak and low values for a given voltage. However, a peak voltage may be set for one voltage and a low voltage value set for the other voltage.

Applicant's Figure 5 shows voltage disruption or glitch 506, is a voltage pulse with duration 509 and pulse frequency 508. Referring to the cited prior art, i.e. Fossum '172. Fossum '172 discloses the following in column 3, lines 26-40:

Even though the controller 200 is shown in FIG. 2 as a personal computer, any device capable of outputting several independent waveforms of appropriate voltage level can be used instead. In the preferred mode each control waveform is a **uniform train of rectangular 5V pulses**. Other waveforms can also be generated by the controller and applied to the inputs of the LED driver. In FIG. 2, the signal line 202 controls the infrared LEDs, and lines 204, 206, and 208 correspond respectively to red, green, and blue drivers. As shown, the control signal on each line may have a duty cycle different from other signals. The control is digital in a dual sense: first because each control waveform has only two voltage levels and secondly because the duration of the low and high voltage phases is digitally controlled.

One of ordinary skill in the art would agree that the uniform train of rectangular 5V pulses disclosed by Fossum in Figure 2 reads on the claim 1 limitation "introducing a voltage disruption to the nominal voltage."

Applicant Argues:

Applicant states on page 6, "Similar to claim 1, claim 8 describes a 'voltage disruption,' which is not present in Fossum. Thus, for the most of the same reasons stated above, the

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elements of applicant's claim 8 are not expressly or inherently described in Fossum. And, for at least the reasons described above, a person of ordinary skill in the field of the invention could not interpret the claimed invention of claim 8 to be the same as Fossum."

Examiner Responds:

Examiner is not persuaded. Applicant states in page 7 of the specification, the following:

With the DUT 105 powered on, the operator of the computer application 102 is able to specify voltage disruptions or glitches 506-507 to be enabled. The operator may select whether the voltage disruptions 506-507 will be enabled for the 5 Volt power 502, the 12 Volt power 503, or both. The operator is able to control the voltage disruption frequency by controlling the interval 508 between disruptions. The operator is also able to control the duration of the voltage disruption 509 and the amplitude 510. If the operator specifies a peak voltage value for the voltage disruption, then the corresponding low voltage value will be a default, and vice versa. The operator may not set both peak and low values for a given voltage. However, a peak voltage may be set for one voltage and a low voltage value set for the other voltage.

Applicant's Figure 5, shows voltage disruption or glitch 506 is a voltage pulse with duration 509 and pulse frequency 508. Examiner maintains that one of ordinary skill in the art would recognize applicant's Figure 5 as depicting a series of pulses. In this regard, Fossum's Figure 5 shows at least one series of pulses, item 216 which reads on the claim limitation "circuitry coupled to a power source, the circuitry being configured to produce a voltage disruption."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Patent related correspondence can be forwarded via the following FAX number (703) 872-9306

Etienne LeRoux



November 12, 2003



SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
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